

### III. REMARKS

1. Claims 1-47 remain in the application. Claims 1, 40, and 41 have been amended.

The amendments are not limiting, are not made for reasons related to patentability, and do not raise issues of estoppel.

Applicants appreciate the courtesies extended by the Examiner during the teleconference of 13 June 2005. It is Applicants' understanding that, as a result of the interview, the Examiner agrees that Manjunath does not disclose using the coding efficiency or coding error to select a pitch predictor order.

2. Applicants respectfully submit that claims 1-47 are patentable over the combination of Matsumoto et al. (US 5,819,212, "Matsumoto") in view of Manjunath et al. (US 6,691,084, "Manjunath").

The combination of Matsumoto and Manjunath fails to disclose or suggest using the determined coding efficiency to select a pitch predictor order for the selected coding method by comparing the coding efficiencies determined for said at least two predicted signals and selecting the pitch predictor order which produces the highest coding efficiency when the audio signal is coded on the basis of a predicted signal in the selected coding method, as recited by claims 1, 21, 27, 42, 43, and 47.

The combination of Matsumoto and Manjunath fails to disclose or suggest all the above features and also fails to disclose or suggest selecting the pitch predictor order which produces the smallest coding error, or the smallest prediction error, when the audio signal is coded on the basis of a predicted signal in

the selected coding method, as recited by claims 40, 41, 45, and 46.

The Examiner correctly points out that Matsumoto fails to disclose or suggest this feature. Applicants respectfully submit that Manjunath also fails to disclose or suggest this feature.

In Manjunath, column 15, line 49 through column 16, line 11, (cited in the Office Action) describes how frames are categorized into inactive frames, active voiced and unvoiced frames, and active transient frames before encoding. Inactive and active unvoiced frames are coded using a NELP mode, active voiced frames are coded using a PPP mode, and active transient frames are coded using a CELP mode.

The Examiner states that NELP, PPP and CELP modes each have a different pitch predictive order that is used according to each coding method, and therefore it would be obvious to one skilled in the art to modify Matsumoto to use a determined coding efficiency to select a pitch predictor order because it would improve coding efficiency.

Applicants respectfully disagree because Manjunath classifies the signals into various categories and then uses a specific coding mode for each category. In contrast, the present invention determines a coding efficiency for at least two signals, uses the determined efficiency to select a coding method, then uses the determined efficiency to select a pitch predictor order. Further, the pitch predictor order that produces the highest coding efficiency is selected.

There is nothing about using a coding efficiency to select a pitch predictor order in Manjunath.

Applicants wish to point out that if the rejection is based on inherency, it must include a rationale or evidence tending to show inherency.

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish inherency. ... To establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference.... (MPEP 2112 quoting *In re Rijckaert*, 9 F.3d 1531, 1534, (Fed. Cir. 1993), and *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App.&Inter. 1990), emphasis in originals).

Applicants respectfully submit that in addition to not being disclosed in the cited references, using a coding efficiency to select a pitch predictor order is also not inherent in either of Matsumoto or Manjunath.

The above-mentioned coding methods have other technical differences in addition to different pitch predictive orders and they are utilized for coding different types of signals.

Changing a coding mode based on a signal type and varying a pitch predictor order according to a determined coding efficiency each have clear technical differences. For example, the coding system presented in Manjunath is a feedforward system (see the Abstract and column 15, line 49 through column 16, line 11, cited in the Office Action).

Returning to Matsumoto, the Office Action states that Matsumoto teaches audio signal coding and making voiced/unvoiced decisions based on the input signal (col. 11, lines 25-40). In this section, Matsumoto teaches using CELP coding for coding of the unvoiced portion of the signal. In the present application, V/UV-categorizing is not made, nor used in deciding on a coding

mode selection. Furthermore, the encoding system presented in Matsumoto is a feedforward system.

Both of the cited references use categorizing of the signal before encoding. This is simply not done in the present application. Further, neither of the cited references teaches nor suggests selecting the pitch predictor order or coding mode after the encoding. This presents a clear inventive step over the combination of Matsumoto and Manjunath.

At lease for these reasons, Applicants respectfully submit that the combination of Matsumoto and Manjunath fails to disclose or suggest all the features of the present invention and thus, does not render the independent claims obvious.

Therefore, Applicants respectfully submit that independent claims 1, 21, 27, 40-43, and 45-47, and dependent claims 2-20, 22-26, 28-39, and 44 are patentable over the combination of Matsumoto and Manjunath.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

A check in the amount of \$450.00 is enclosed for a two month extension of time.

The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,

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*20 June 2005*  
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I hereby certify that this correspondence is being deposited with the United States Postal Service on the date indicated below as first class mail in an envelope addressed to the Commissioner of Patents, P.O. Box 1450, Alexandria VA 22313-1450.

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